

**REMARKS**

**A. BACKGROUND**

The present Amendment is in response to the Office Action mailed July 21, 2009. Claims 1, 2, 4-17, 19-21, and 24-40 were pending, claims 25-29 were previously withdrawn, and claims 1, 2, 4-17, 19-21, 24, and 30-40 were rejected in view of cited art.<sup>1</sup> By this amendment, claim 31 is canceled, claims 1, 6, 14, 19, 30, and 40 are amended, and no new claims are added. Claims 1, 2, 4-17, 19-21, 24-30, and 32-40 are now pending in view of the above amendments.<sup>2</sup>

Reconsideration of the application is respectfully requested in view of the above amendments to the claims and the following remarks. For the Examiner's convenience and reference, Applicant's remarks are presented in the order in which the corresponding issues were raised in the Office Action.

Please note that the following remarks are not intended to be an exhaustive enumeration of the distinctions between any cited references and the claimed invention. Rather, the distinctions identified and discussed below are presented solely by way of example to illustrate some of the differences between the claimed invention and the cited references. In addition, Applicant requests that the Examiner carefully review any references discussed below to ensure that Applicant's understanding and discussion of the references, if any, are consistent with the Examiner's understanding.

**B. PRIOR ART REJECTIONS**

**I. REJECTION UNDER 35 U.S.C. § 103**

The Office Action rejected claims 1, 2, 4-6, 8, 11, 13-16, 19-21, 24, 30-35, 38, and 40 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Publication No. 2003/0055455 (*Yang*) in view of U.S. Patent No. 7,431,729 (*Chanduszko*). Claims 7, 9, 36, and 39 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Yang* in view of *Chanduszko* as applied to claims 1 and 30 and further in view of U.S. Patent No. 6,080,182 (*Shaw*). Claims 10 and 37 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Yang* in view of *Chanduszko* as

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<sup>1</sup> Although the prior art status of the cited art is not being challenged at this time, Applicant reserves the right to challenge the prior art status of the cited art at any appropriate time, should the need arise. Accordingly, any arguments and amendments made herein should not be construed as acquiescing to any prior art status of the cited art.

<sup>2</sup> Support for the claim amendments and/or new claim(s) can be found throughout the specification and/or drawings as originally filed.

applied to claims 1 and 30 and further in view of U.S. Patent No. 5,855,614 (*Stevens*). Claims 12 and 17 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Yang* in view of *Chanduszko* as applied to claims 1 and 14 above, and further in view of U.S. Patent No. 6,949,113 (*Van Tassel*). Applicant respectfully requests withdrawal of the rejections and allowance of the claims because the cited references, either alone or in combination, fail to teach or suggest each and every element of the claims, as amended herein.

The Office Action cites *Yang* as teaching "a device for sealing a puncture (Figure 11) comprising first and second discs and a joint" (Office Action, pg. 1). "[T]he first disk is adapted to engage and substantially conform to the interior vessel surface, and the second disc is configured to engage the tissue." *Id.* *Chanduszko* is cited in the Office Action as teaching a sealing device "having two disks wherein the disks comprise self-expanding wire frames having petals directly connected to the joints" (Office Action, pg. 2). *Shaw* is cited in the Office Action for teaching a sealing device that includes "a first disk that connects to a proximal element wherein the proximal element comprises a spring." *Id.* *Shaw* is further cited in the Office Action for teaching a "delivery element constrained to translate a maximum distal depth" (Office Action, pg. 3). *Stevens* is cited in the Office Action for teaching a sealing device where "the first disc and the proximal element comprise barbs, hooks, sharp edges, or roughened surfaces." *Van Tassel* is cited in the Office Action for teaching a sealing device for sealing an opening in a blood vessel that includes "a coagulant-enhancing agent that is disposed on a disk" (Office Action, pg. 4).

Claim 1, as amended herein, recites, in part, "the first disk having a retracted delivery configuration adapted for delivery to the puncture and an expanded deployed configuration in which the first disk is adapted to engage with and substantially conform to the interior vessel surface, and the proximal element having a retracted delivery configuration for delivery to the tissue proximal to the puncture and a retracted deployed configuration configured to engage the tissue proximal to the interior vessel surface."

Claim 14, as amended herein, recites, in part, "the first disk including a first threaded member and the second disk including a second threaded member, the first and second threaded members being configured for releasably coupling the first disk to the second disk; the first threaded member including a keyway and the second threaded member including at least one slot, the keyway being adapted to permit positioning of the first disk relative to the interior vessel surface and for holding the first disk in a stationary position relative to the interior vessel surface,

and the at least one slot being adapted for driving the second threaded member relative to the first threaded member."

Claim 30, as amended herein, recites, in part, "the first disk including a first threaded member and the proximal element including a second threaded member, the first and second threaded members being configured for releasably coupling the first disk to the proximal element; the first threaded member including a keyway and the second threaded member including at least one slot, the keyway being adapted to permit positioning of the first disk relative to the interior vessel surface and for holding the first disk in a stationary position relative to the interior vessel surface, and the at least one slot being adapted for driving the second threaded member relative to the first threaded member while the first disk is held in the stationary position relative to the interior vessel." Claim 30 further recites, in part, "the first disk having a retracted delivery configuration adapted for delivery to the puncture and an expanded deployed configuration in which the first disk is adapted to engage with and substantially conform to the interior vessel surface, and the proximal element being configured to engage the tissue proximal to the interior vessel surface, wherein the first disk and the proximal element are biased toward one another such that first disk is held in sealing engagement against the interior vessel surface by the proximal element being engaged with the tissue proximal to the interior vessel surface."

Claim 40, as amended herein, recites, in part, "the first disk including a threaded nut and the proximal element including a threaded bolt, the threaded nut and the threaded bolt being configured for releasably coupling the first disk to the proximal element, the threaded bolt being configured to be driven relative to the threaded nut." The claimed device further includes "a minimally invasive delivery apparatus" that includes "third and fourth delivery elements; the third delivery element being configured to engage with a keyway on the threaded nut for positioning the first disk relative to the interior vessel surface and for holding the first disk in a stationary position; the fourth delivery element being configured to engage with at least one slot on the threaded bolt for driving the threaded bolt relative to the threaded nut to hold the first disk in sealing engagement against the interior vessel surface and to position the proximal element in engagement with the tissue proximal to the interior vessel surface; and the third and fourth delivery elements being further configured to permit the first disk to be released from engagement with the interior vessel surface, thereby permitting the device to be repositioned." Claim 40 further recites, in part, "the first disk having a retracted delivery configuration adapted

for delivery to the puncture and an expanded deployed configuration in which the first disk is adapted to engage with and substantially conform to the interior vessel surface, and the proximal element having a retracted delivery configuration for delivery to the tissue proximal to the puncture and a retracted deployed configuration configured to engage the tissue proximal to the interior vessel surface."

Applicant respectfully submits that no combination of *Yang, Chanduszko, Shaw, Stevens*, and *Van Tassel* teaches or suggests a sealing device that includes a first disk and a "proximal element having a retracted delivery configuration for delivery to the tissue proximal to the puncture and a retracted deployed configuration configured to engage the tissue proximal to the interior vessel surface," or "the proximal element having a retracted delivery configuration for delivery to the tissue proximal to the puncture and a retracted deployed configuration configured to engage the tissue proximal to the interior vessel surface, wherein the first disk and the proximal element are biased toward one another such that first disk is held in sealing engagement against the interior vessel surface by the proximal element being engaged with the tissue proximal to the interior vessel surface," as claimed herein. Likewise, Applicant respectfully submits that no combination of *Yang, Chanduszko, Shaw, Stevens*, and *Van Tassel* teaches or suggests a sealing device that includes a first disk that includes a first threaded member and a second disk that includes a second threaded member that are "configured for releasably coupling the first disk to the second disk; the first threaded member including a keyway and the second threaded member including at least one slot, the keyway being adapted to permit positioning of the first disk relative to the interior vessel surface and for holding the first disk in a stationary position relative to the interior vessel surface, and the at least one slot being adapted for driving the threaded bolt relative to the threaded nut," as claimed herein. Applicant also respectfully submits that no combination of *Yang, Chanduszko, Shaw, Stevens*, and *Van Tassel* teaches or suggests a sealing device that includes "a minimally invasive delivery apparatus" that includes "third and fourth delivery elements; the third delivery element being configured to engage with a keyway on the threaded nut for positioning the first disk relative to the interior vessel surface and for holding the first disk in a stationary position; the fourth delivery element being configured to engage with at least one slot on the threaded bolt for driving the threaded bolt relative to the threaded nut to hold the first disk in sealing engagement against the interior vessel surface and to position the proximal element in engagement with the tissue proximal to the interior vessel surface; and the third and fourth delivery elements being further configured to permit the first

disk to be released from engagement with the interior vessel surface, thereby permitting the device to be repositioned." Moreover, Applicant respectfully submits that the rejection under 35 U.S.C. § 103(a) is not supported because a person having ordinary skill in the art would have no motivation to modify the cited references in order to obtain the sealing device claimed herein.

Applicant respectfully requests withdrawal of the rejection of claims 1, 14, 30, and 40 because the cited references fail to teach or suggest each and every element of the claims and a person having ordinary skill in the art would have no motivation to modify the references in order to obtain the claimed invention. Moreover, Applicant respectfully submits that claims 2, 4-13, 15-17, 19-21, 24, and 32-40, each of which depends from one of claims 1, 14, 30, and 40, respectively, are allowable for at least the same reasons that claims 1, 14, 30, and 40, are allowable. Applicant respectfully requests reconsideration and allowance of the pending claims.

**C. CONCLUSION**

In view of the foregoing, Applicant respectfully submits that the other rejections to the claims are now moot and do not, therefore, need to be addressed individually at this time. It will be appreciated, however, that this should not be construed as Applicant acquiescing to any of the purported teachings or assertions made in the last action regarding the cited art or the pending application, including any official notice. Instead, Applicant reserves the right to challenge any of the purported teachings or assertions made in the last action at any appropriate time in the future, should the need arise. Furthermore, to the extent that the Examiner has relied on any Official Notice, explicitly or implicitly, Applicant specifically requests that the Examiner provide references supporting the teachings officially noticed, as well as provide the required motivation or suggestion to combine references with the other art of record.

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Reply to Office Action mailed July 21, 2009

For at least the foregoing reasons, Applicant respectfully submits that the pending claims are neither anticipated by nor made obvious by the art of record. In the event that the Examiner finds any remaining impediment to a prompt allowance of this application that may be clarified through a telephone interview, the Examiner is requested to contact the undersigned attorney.

Dated this 21st day of January, 2010.

Respectfully submitted,

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